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(for office use only)

WASHINGTON STATE BUILDING CODE COUNCIL
APPLICATION FOR REVIEW OF A PROPOSED LOCAL AMENDMENT TO THE WASHINGTON STATE BUILDING CODE

1. State Building Code to be Amended.

[ ] International Building Code	[ ] Ventilation and Indoor Air Quality Code
[X] International Residential Code	[ ] International Mechanical Code
[ ] ICC ANSI A117.1 Accessibility Code	[ ] International Fuel Gas Code
[ ] International Fire Code	[ ] NFPA 54 National Fuel Gas Code
[ ] Uniform Plumbing Code	[ ] NFPA 58 Liquefied Petroleum Gas Code
[ ] State Energy Code	
Section Many	**Page** Many

2. Type of Local Amendment

[ ] Preproposal	**[X] Final Adoption**	**[ ] Reconsideration**

3. Applicant:

City of Seattle Department of Planning and Development

4. Local Jurisdiction Adoption

121521	July 16, 2004
Ordinance or Resolution No.	Date Adopted

5. Signed:

_____	Principal Engineer	_____
Proponent: Jonathan Siu	Title	Date

6. Contact Person:

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Title: Code Development Supervisor
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Revised 8/04

7. Proposed Code Amendment

Code IRC Section Many Page Many

All of Seattle's residential amendments to the IRC are presented on this form. Sections 7 and 8 of the form are repeated for each of the amendments. It begins with an explanation of rationales that apply to all or many of the amendments. A more detailed, item-by-item presentation of the amendments follows.

8. Background information on amendment.

Local government residential amendments submitted to the Council for approval should be based on:

(1) Climatic conditions unique to the jurisdiction.
(2) Geologic or seismic conditions unique to the jurisdiction.
(3) Environmental impacts, such as noise, dust, etc., unique to the jurisdiction.
(4) Life, health or safety conditions unique to the jurisdiction.
(5) Other special conditions unique to the jurisdiction.

General Background. Seattle is unique in the state for several reasons pertinent to the issues presented in these code amendments:

- Under the Growth Management Act, Seattle has made a strong commitment to accept population density. According to the 2000 Census, the average density of population in Seattle was 6,717 people per square mile, an increase of 562 per square mile since 1990. Based on 2004 estimated population, the density has increased to 6,817 people per square mile.

- Much of the new residential development in Seattle occurs on "infill" lots—sites that are more difficult on which to build because they are small, irregularly-shaped, steeply-sloped, or with buildings very near the property line on the adjacent lot. Many sites have restrictions on the location of buildings, such as steep slopes and riparian corridors.

- Another factor that distinguishes Seattle from many smaller jurisdictions is the city's ability to deliver fire protection service—Seattle Fire Department's average response time for fire, rescue and hazardous materials calls in 2004 was 4.6 minutes.

- Seattle has a large number of rental housing units, and has had minimum standards for rental housing since approximately 1959. Seattle has always coordinated the regulations for new construction with the Housing and Building Maintenance Code (HBMC), which provides minimum standards for rental housing. This practice adds assurance that housing will comply with the HBMC if it is converted to rental. Several of the code amendments have been adopted for that purpose.

- Seattle's minimum housing standards have become even more important since Seattle is providing greater density of housing under GMA. Minimum standards help prevent the development of slum-like conditions in the city.

- Seattle has a long history of amending the construction codes. The first Seattle Building Code was adopted in 1889 or earlier, long before there was a model code. Many of Seattle's amendments have been in effect since before the State Building Code was first adopted.

- Local jurisdictions have authority to approve modifications and alternate materials, design and methods of construction and to interpret the code. (See IBC Section 104.10 & 104.11.) Seattle has a policy of including with the code as many of the recurring alternates and interpretations as possible so that all permit applicants can know about them.

- Seattle's amendments are reviewed by a public advisory board consisting of 13 members representing building professions and the general public. This Board, the Construction Codes Advisory Board, reviews each section of the code, and its member often propose amendments. The Board has reviewed and approved each of Seattle's amendments.

- Finally, Seattle takes pride in the qualifications of our staff, the quality of work done by our staff, and their ability to exercise judgment in devising code provisions and in applying the codes to permit applications. We employ ten structural engineers as plan reviewers. Building plans examiners, who review less complicated applications, are required to have a bachelor's degree in architecture, construction technology or a related field plus two years of related experience before they can be hired. In addition, staff participates actively in development of the model codes. We believe this participation gives us a more in-depth familiarity with the rationale behind the model code provisions, and gives us insights into how to improve the model codes.

Amendment #R1

7. Proposed Code Amendment

Code IRC Section R202 Page 13

FIRE SEPARATION DISTANCE. The distance measured from the building face to the closest interior lot line, to the ((~~centerline~~)) opposite side of a street, alley or public way, or to an imaginary line between two buildings on the property. The distance shall be measured at right angles from the lot line.

8. Background information on amendment. This amendment is the same as the amendment to IBC Section 702.1 (amendment #4); the IRC definition is almost identical to the IBC definition, and the same rationale applies.

Amendment #R2

7. Proposed Code Amendment

Code IRC Section R202 Page 19

[B] STORY ABOVE GRADE. Any story having its finished floor surface entirely above grade, except that a basement shall be considered as a story above grade where the finished surface of the floor above the basement is:

1. More than 6 feet (1829 mm) above grade plane((.));
2. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter((.)); or
3. More than 12 feet (3658 mm) above the finished ground level ((~~at any point~~)) for more than 25 feet (7620 mm) of the perimeter. Required driveways up to 22 feet (6706 mm) shall not be considered in calculating the 25 foot distance if there is at least 10 feet (3048 mm) between the driveway and all portions of the 25-foot area. See Figure R202.

8. Background information on amendment. This amendment is the same as the amendment to IBC Sections 202 and 502.1 (amendment #1). The IRC provision is copied from the IBC, and the same rationale applies.

Amendment #R3

7. Proposed Code Amendment

Code IRC Section 304.1 Page 45

R304.1 Minimum area. Every dwelling unit shall have at least one habitable common room that shall have not less than 120 square feet (11.2 m^2) of gross floor area. Every room which is used for both cooking and living or both living and sleeping quarters shall have a floor area of not less than 130 square feet (12 m^2) if used or intended to be used by only one occupant, or of not less than 150 square feet (14 m^2) if used or intended to be used by more than one occupant. Where more than two persons occupy a room used for sleeping purposes, the required floor area shall be increased at the rate of 50 square feet (4.6 m^2) for each occupant in excess of two. In a dormitory, minimum floor area shall be 60 square feet (5.5 m^2) per single or double bunk and aisles not less than 3 feet (914 mm) in width shall be provided between the sides of bunks and from every bunk to an exit or exit-access doorway.

8. Background information on amendment. This amendment is the same as the amendment to IBC Section 1208.3 (amendment #17), and the same rationale applies.

Amendment #R4

7. Proposed Code Amendment

Code IRC Section R306.2 Page 45

R306.2 Kitchen. Each dwelling unit shall be provided with a kitchen area and every kitchen area shall be provided with a sink, hot and cold running water, counter work space, cabinets for storage of cooking utensils and dishes, and stove and refrigerator or

adequate space for the installation of the stove and refrigerator. Splash backs and counter tops shall have impervious surfaces.

8. Background information on amendment. This amendment is the same as the amendment to IBC Section 12085 (amendment #18), and the same rationale applies.

Amendment #R5

7. Proposed Code Amendment

Code IRC Section R306.5 Page 45

R306.5 Access to Water Closets. The only access from a bedroom to a bathroom shall not be through another bedroom. No water closet shall be housed in any room or space used for the preparation of food nor shall a water closet compartment open directly, without a door, into any such room or space.

8. Background information on amendment. This amendment is the same as the amendment to IBC Section 1210.5 (amendment #19), and the same rationale applies.

Amendment #R6

7. Proposed Code Amendment

Code IRC Section R326 Page 59

SECTION R326
METHANE REDUCTION MEASURES

R326.1 Applicability. This section applies to all construction activities on or within 1,000 feet (305 m) of an active, closed or abandoned landfill that has been identified by the building official to be generating levels of methane gas on-site at the lower explosive limits or greater levels. The distance shall be calculated from the location of the proposed structure to the nearest property line of the active or former landfill site. The building official may waive these requirements if technical studies demonstrate that dangerous amounts of methane are not present on the site.

R326.2 Protection of Structures. All enclosed structures to be built within the 1,000 foot (305 m) landfill zone shall be protected from potential methane migration. The method for insuring a structure's protection from methane shall be addressed in a report prepared by a licensed civil engineer and submitted by the applicant to the department for approval. The report shall contain a description of the investigation and recommendations for preventing the accumulation of explosive concentrations of methane gas within or under enclosed portions of the building or structure. At the time of final inspection, the civil engineer shall furnish a signed statement attesting that, to the best of the engineer's knowledge, the building or structure has been constructed in accordance with the recommendations for addressing methane gas migration.

8. Background information on amendment. This amendment is the same as the amendment to IBC Section 1813 (amendment #25). The IRC provision is copied from the IBC, and the same rationale applies.

Amendment #R7

7. Proposed Code Amendment

Code IRC Section R327 Page 59

SECTION R327
Security from Criminal Activity

327.1 Building entrance locks. Building entrance doors, including garage doors, shall be capable of locking. They shall be equipped with a dead-locking latch bolt with at least a 1/2-inch throw which penetrates the striker not less than 1/4 inch. Building entrance doors shall be openable from the inside without use of a key or special knowledge or effort.

EXCEPTION: Garage-to-exterior doors may be equipped with an electronically-operated remote control device for opening and closing in lieu of a dead-locking latch bolt. When garage-to-exterior doors are equipped with remote control devices, garage-to-building doors need not be capable of locking.

327.2. Observation Ports. Every building entrance door, other than garage doors, shall have a visitor observation port or glass side light. Observation ports shall be installed at a height of not less than 54 inches and not more than 66 inches from the floor.

327.3. Windows and Sliding Doors. Dead bolts or other approved locking devices shall be provided on all sliding doors and openable windows. The lock shall be installed so that the mounting screws for the lock case are inaccessible from the outside.

EXCEPTION: Windows whose sills are located 10 feet or more above grade, or 10 feet or more above a deck, balcony or porch that is not readily accessible from grade except through a housing unit need not have operable inside latching devices.

327.4 Alternate security devices. Subject to the approval of the building official, alternate security devices may be substituted for those required by this section. Alternate devices must have equal capability to resist illegal entry. The installation of the device must not conflict with other requirements of this code and other ordinances regulating the safety of exiting.

8. Background information on amendment. This amendment is a portion of the amendment to IBC Section 420 (amendment #3), and the same rationale applies.

Amendment #R8

7. Proposed Code Amendment

Code IRC Section R328 Page 59

SECTION 328
SOUND TRANSMISSION CONTROL

R328.1 General. Wall and floor–ceiling assemblies separating dwelling units shall provide airborne sound insulation for walls, and both airborne and impact sound insulation for floor–ceiling assemblies.

Joints in the perimeter of such separating wall or floor-ceiling assemblies shall be acoustically sealed with a permanent resilient material approved for such purpose. The separating wall or floor-ceiling assembly shall extend completely to and be sealed to another separating assembly or an exterior wall, roof or floor assembly.

Conduits, ducts, pipes and vents within such wall or floor-ceiling assemblies causing vibration shall be reasonably isolated from the building construction at points of support by means of resilient sleeves, mounts or underlayments. All other openings through which such conduits, ducts, pipes or vents pass shall have the excess opening fully sealed with insulative and permanently resilient materials approved for such purpose.

Design and materials for sound transmission control shall not impair the fire-resistive integrity of separating walls or floor-ceiling assemblies required to be of fire-resistive construction.

R328.2 Airborne Sound. Airborne sound insulation for wall and floor–ceiling assemblies shall meet a Sound Transmission Class (STC) rating of 45 when tested in accordance with ASTM E 90.

Electrical outlet boxes shall not be placed back-to-back and shall be offset by not less than 12 inches (305 mm) from outlets in the opposite wall surface. The back and sides of boxes shall be sealed with one-eighth-inch resilient sealant and backed by a minimum of 2-inch thick material fiber insulation or approved equivalent.

R328.3 Structural-borne sound. Floor/ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within a structure shall have an Impact Insulation Class (IIC) rating of not less than 50 when tested in accordance with ASTM E 492. Floor covering may be included in the assembly to obtain the required ratings.

EXCEPTION: Floor assemblies in bathrooms are not required to meet the IIC rating of 50 where structural concrete floor systems are used.

R328.4 Tested Assemblies. Field- or laboratory-tested wall or floor-ceiling designs having an STC or IIC of 50 or more may be used without additional field testing when, in the opinion of the building official, the tested design has not been compromised by flanking paths. Tests may be required by the building official when evidence of compromised separations are noted. Wall or floor-ceiling designs field tested by ASTM E 336 having a minimum FSTC or FIIC rating of 45 may be used.

R328.5 Field Testing and Certification. Field testing, when permitted to determine airborne sound transmission or impact sound insulation class, shall be done in accordance with ASTM E 492 under the supervision of an acoustical professional who is experienced in the field of acoustical testing and engineering and who shall forward certified test results to the building official that minimum sound insulation requirements stated above have been met.

R328.7 Sound Transmission Control Systems. Generic systems as listed in GA 600-00 may be accepted where a laboratory test indicates that the requirements of Section 1206 are met by the system.

8. Background information on amendment. This amendment is the same as the amendment to IBC Section 1207 (amendment #15), and the same rationale applies.

Amendment #R9

7. Proposed Code Amendment

Code IRC Section R329 Page 59

SECTION R329
FLOATING HOMES

R329.1 Definitions. Certain words and terms used in this chapter, unless clearly inconsistent with their context, are defined as follows:

FLOATING HOME is a building constructed on a float used in whole or in part for human habitation as a single-family dwelling which is moored, anchored or otherwise secured in waters.

FLOATING HOME MOORAGE is a waterfront facility for the moorage of one or more floating homes and the land and water premises on which such facility is located.

FLOATING HOME SITE is a part of a floating home moorage, located over water, and designed to accommodate one floating home.

GARBAGE is all discarded putrescible waste matter, including small dead animals weighing not over 15 pounds (6.8kg), but not including sewage or human or animal excrement.

SEWAGE is all water-carried waste discharged from the sanitary facilities of buildings occupied or used by people.

R329.2 Moorage Location. Every floating home moorage shall be located on privately-owned or privately-controlled premises in accordance with the Land Use Code.

R329.3 Land Access. Every floating home moorage shall have not less than 20 feet (6096 mm) of land frontage abutting a public street sufficiently improved for automobile travel.

R329.4 Moorage Walkways. Every floating home moorage shall have firm and substantial walkways with a net width of not less than 4 feet (1219 mm) and extending from land to every floating home site in the moorage.

R329.5 Moorage Lighting. Every floating home moorage and the walkways to every floating home site shall be illuminated to provide safe access. All luminaires shall be listed for the use.

R329.6 Fire Protection. Floating home moorages shall be provided with fire extinguishing equipment as follows:

1. **Portable Fire-protection Equipment**. One fire extinguisher, 2A, 20-B:C rating minimum, shall be provided in each required hose station. The fire chief shall designate the type and number of all other fire appliances to be installed and maintained in each floating home moorage.
2. **Standpipes**. All portions of floats exceeding 250 feet (76 500 mm) in distance from fire apparatus access and marine service stations shall be provided with an approved wet standpipe system installed according to Section 905 and the Fire Code.
   2.1. Hose stations shall be spaced to provide protection to any portion of floats, floating homes or floating vessels. Hoses shall be mounted on a reel or rack and enclosed within an approved cabinet. Hose stations shall be labeled

FIRE HOSE-EMERGENCY USE ONLY. All equipment shall meet the approval of the fire chief.

2.2. At the shore end, the waterline shall be equipped with a single 2-1/2 inch (64 mm) fire department connection.

2.3. Waterlines shall normally be dry where the area is subject to freezing temperatures.

R329.7 Water Service Connections. Every floating home moorage shall have a water service connection and shall provide water service piping securely fastened and stabilized above water from such water service connection to an outlet connection at each floating home site on a floating home moorage. The water piping in every floating home in a floating home moorage shall be connected to the water service outlet serving such floating home and such connection shall be securely fastened and stabilized above high water line. Water service connections and water service piping shall be constructed, installed and maintained in accordance with applicable standards established by or pursuant to ordinance.

R329.8 Public Sewer Connection. Every floating home moorage any part of which is within 300 feet (91 440 mm) of a public sewer and every floating home moorage on Shilshole Bay, Salmon Bay, Lake Washington Ship Canal, Lake Union, Portage Bay, Union Bay and that portion of Lake Washington lying within the City limits of Seattle shall have a lawfully-installed connection to a public sewer.

R329.9 Local Side Sewer System. Every floating home moorage within the limits specified in Section R329.8 shall provide a local side sewer system for the collection of sewage from every floating home in the moorage. The local side sewer system shall be connected to the public sewer, shall have an inlet connection at each floating home site and shall be constructed, installed and maintained in accordance with this and all other applicable ordinances regulating the construction, alteration, repair and connection of side sewers.

R329.10 Connection to Local Side Sewer System. Every floating home in a floating home moorage which is required under Section R329.8 to be connected to a public sewer shall be connected to the local side sewer system. Owners and operators of floating home moorages shall not permit any floating home to be moored at any moorage under their control unless the floating home is connected to the local side sewer system. It is unlawful for any person to use, occupy or let any floating home for human habitation within the limits specified in Section R329.8 unless it is connected to the sewer system.

A reconnection permit shall be required for any floating home which is relocated from its original site of connection to a local side sewer system. Such reconnection shall be subject to the approval of the Director of Seattle Public Utilities as to compliance with this chapter.

R329.11 Sewer Installation Fees. The fee for the installation of any side sewer serving a floating home moorage is the fee provided by law for the connection to the public sewer of side sewers serving mobile home parks.

R329.12 Plumbing Systems. All plumbing and plumbing systems in every floating home shall meet the requirements of the Seattle Plumbing Code except as otherwise approved by the Director of Public Health in accordance with the Plumbing Code.

R329.13 Garbage Disposal. Every floating home moorage shall be provided with adequate garbage storage and collection facilities which shall be located in an accessible

place on the moorage site. No garbage or refuse shall be thrown or dumped into the waters.

R329.14 Electrical Service and Wiring. Electrical service to floating homes and floating home moorages shall be provided as approved by the City Light Department. Electrical wiring and equipment in every floating home shall conform to requirements of the Electrical Code. No floating home shall be permitted to connect or reconnect to the electric utility's distribution system unless approved for such connection by the building official in accordance with the Electrical Code.

R329.15 New Construction. All new construction of floating homes or major alterations thereto and all floating homes moved into city waters, excluding the structural members used for flotation, shall conform to the requirements for dwellings as set forth in this code and all other applicable codes and ordinances regulating the design, construction, use and occupancy of such buildings and the required installations therein.

R329.16 Housing Standards for Existing Floating Homes. Every floating home shall comply with the minimum housing standards as set forth in the Seattle Housing and Building Maintenance Code except as otherwise approved by the building official in accordance with the Housing and Building Maintenance Code.

R329.17. Property Lines. The boundaries of floating home moorage sites shall be considered the lot line for determining compliance with Section R302.

Interpretation R329.17: For the purposes of determining the required wall and opening protection and roof-covering requirements, distance shall be measured to the exterior wall of the home, and not to the float.

R329.18 Approval of Moorage Site Plan Required. Every floating home moorage shall continuously conform to a moorage site plan which has been approved by the building official. Such approval shall be obtained as follows: Three copies of the site plan, drawn to scale and completely dimensioned, and setting forth the address and legal description of the property on which the moorage is located and the name and address of the owner or operator of the moorage, shall be filed with the building official.

The moorage site plan shall show:

1. The dimensions of the floating home moorage site;
2. The location of abutting public waterways;
3. The location and dimensions of private waterways and land access to the moorage;
4. The location and identification of individual floating home sites;
5. The location and dimensions of off-street parking spaces;
6. The location and dimensions of walkways and any accessory structures or facilities;
7. The water service system;
8. The local side sewer system; and
9. The electrical service and lighting system.

The site plan shall be examined by the building official, the fire chief, the Director of Public Health, the Director of Seattle Public Utilities, and the Director of Transportation. Upon approval of a floating home moorage site plan by the fire chief, the Director of Public Health, the Director of Seattle Public Utilities, and the Director of Transportation and upon being satisfied that the plan conforms to the requirements of this code and other applicable ordinances and is otherwise lawful, the building official shall approve such

plan. One copy of the approved site plan shall be retained in the office of the building official, one copy in the office of the Director of Public Health, and one copy, which shall be maintained on the premises of the floating home moorage, shall be returned to the owner or operator.

R329.19 Moorage Register of Ownership. Every owner or operator of a floating home moorage shall maintain a current register of every floating home moored on the premises, such register to record the name and address of the legal owner of each floating home and the registration number assigned to it by the King County Assessor. A copy of said register shall be made available upon request to any City department head referred to in this chapter or to his/her representative.

8. Background information on amendment. These amendments supplement the provisions of the IRC which contains no provisions for floating homes.

Amendment #R10

7. Proposed Code Amendment

Code IRC **Section** G2439.5.3 **Page** 384

G2439.5.3 Protection required. Clothes dryer exhaust ducts shall be protected by a steel plate or clip not less than 1/16 inch (1.59 mm) in thickness and of sufficient width to fully protect the duct. Plates or clips shall be placed on the finish face of all framing members which the clothes dryer exhaust duct passes through when there is less than 1 1/4 inch (32 mm) of framing material between the duct and the finish face. Plates or clips shall also be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct.

8. Background information on amendment. This amendment interprets and clarifies the provision in Section 504.6 that requires a "smooth interior surface" in dryer exhaust ducts. It addresses a known hazard from lint being caught in dryer ducts. We have found that, since ducts are installed prior to wallboard, they are often penetrated by screws and nails unless protected. This amendment is the same as IMC #M3.